REMARKS/ARGUMENTS

Claims 1-9, 11-12, and 14-44 are pending in the present application.

Claims 30-41 are withdrawn.

Claims 10 and 13 are cancelled.

Claims 1, 17, and 30 are currently amended.

New Claims 42-44 are presented. Support for these new claims is found in Paragraphs [0054], [0066], [0073], and [00162]-[00170].

Claim Rejections Under 35 USC §112

Claim 17 has been amended to clarify the fact that it is not intended to cover any compounds that are not included in Claim 1.

Claim Rejections Under 35 USC §103

Claims 1-9, 11-12, and 15-29 have been rejected under §103 as being unpatentable over U.S. 6,084,041 ("Andtsjo") in view of U.S. 6,124,231 ("Fritze"). This rejection is respectfully traversed.

To establish a *prima facia* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to combine the references. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim limitations. MPEP §2143.

First, there is no suggestion or motivation that catalysts disclosed in Fritze would produce the claimed catalyst productivity or the claimed polymer properties. The Office has previously suggested that one skilled in the art would not expect the compounds in Fritze to fail in the process in Andtsjo. However, the compounds in Andtsjo themselves do not produce a catalyst productivity of at least 2000 grams of polymer per gram of catalyst per hour nor do they produce polymers with a melting point of at least 145°C. Should the ordinary practitioner by happenchance select the compounds in Applicants' claims, one of ordinary skill in the art would not anticipate or expect the results which are disclosed and claimed in the instant application. Given (1) the results are unexpected, (2) Andtjso fails to teach or disclose the claimed catalyst activity nor the claimed polymer properties, and (3) Fritze also fails to suggest that the catalyst disclosed therein would produce either the claimed catalytic activity nor the claimed polymer properties; there cannot be any motivation to combine Andtjso with Fritze to produce the claimed invention.

Second, there is no reasonable expectation of success that the disclosed combination would have produced the claimed invention. Applicants have disclosed a 10-fold increase in catalyst rate

over similar catalyst compounds which are solely substituted at the number 2 position. Further, the Applicants have disclosed a 5-fold increase in catalyst rate over the unsubstituted system that is disclosed in Andtsjo. Therefore, it is reasonable that if one skilled in the art determined that the two systems were comparable; one could have expected further substitution to decrease the catalyst rate. At the very least, there is certainly no reasonable expectation that the disclosed combination would have produced the claimed catalytic activity. Thus, Applicants' unexpected increase in catalytic activity over the prior art is deemed to overcome any alleged suggestion of prima facia obviousness. It is respectfully submitted that Applicants' discovered unexpected benefit is neither suggested nor disclosed in the teachings of Andtsjo, Fritze, or the combination of the two references.

It is respectfully submitted that the Office's rejection would have to be based on impermissible hindsight, wherein Applicants' presently claimed invention was used as a roadmap to select the various limitations from the hundred of thousands of catalyst choices disclosed in the prior art. See MPEP §2145.

Even absent hindsight, Applicants' presently claimed invention, as amended, is not rendered obvious by Andtsjo, Fritze, or a combination thereof. It is well settled that even if the process were *prima facie* obvious merely from a consideration of reactants, media and steps employed, the invention as a whole can nevertheless be unobvious within the meaning of 35 USC §103 by reason of an unsuggested increase in yield employing less reactant, *In re Van Schickh* (CCPA 1966) 362 F.2d 821, 150 USPQ 300. Furthermore, claims to a process involving a combination of reactants and reaction conditions within the broad teaching of the prior art are patentable where the combination produces an unexpected result rather than the optimum of that taught by the prior art. *Ex parte Hoff et al.* (POBA 1959) 127 USPQ 281; *In re Sebek* CCPA1972) 465 F.2d 904, 175 USPQ 93. Applicants' allegations of unexpected results cannot be ignored merely because the claimed process is within the broad teachings of the prior art. *In re Cosfello* (CCPA 1973) 480 F.2d 894, 178 USPQ 290. See also, comparative data in examples in the specification showing an unobvious result [*In re Margolis* (CAFC1986) 785 F.2d 1029,228 USPQ 940.]

CONCLUSIONS

In view of the above amendments and remarks, it is respectfully submitted that this application is in condition for allowance. Prompt notice of allowance is respectfully solicited. The Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account number 05-1712. Moreover, if the deposit account contains insufficient funds, the Commissioner is hereby invited to contact Applicants' undersigned representative to arrange payment.

Respectfully submitted,

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